

Rec'd PCT/PTO 05 MAR 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#3

In regard to the application of: Aviram SARIEL et al.

Serial No : 09/926,547

Group Art Unit: To be assigned

I. A. Filing Date : Herewith

Examiner: Unknown

: IMAGE COMPRESSION

INFORMATION DISCLOSURE STATEMENTHon. Commissioner of Patents and Trademarks  
Washington, DC 20231

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Sir:

Technology Center 2100

Applicants respectfully direct the attention of the Examiner to art cited with respect to PCT/IL99/00479 of which the current application is a U.S. national application under 35 U.S.C. §371.

The Examiner is respectfully requested to review and consider this art, in accordance with MPEP 2001.06, MPEP 1893.03(e) and MPEP 1893.03(g) and to indicate in the first office action that he has considered this art. Additionally, the Examiner is respectfully requested to cite those prior art publications mentioned in this application which the Examiner considers to be material or relevant to the present claims.

Further, in order to comply with discretionary regulations 37 C.F.R. §1.97 and §1.98, attached is Form PTO-1449 listing the cited art. Also attached are copies<sup>1</sup> of the art.. This art contains information which the examiner may consider to be important in deciding whether to allow the present application to issue as a patent.

Applicants wish to point out that items 12, 17, 27 and 36 were cited on the PCT International Search Report. Copies of these items are not attached as they are available in the national stage file.

Since items 13-16 are in a foreign language, Applicants attach a copy of an English language abstract to their respective references.

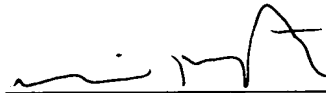
<sup>1</sup> To the extent that a document is listed and no copy of same is attached, then such document is not at the present time available to the undersigned or is available in the national stage file. If a listed document is not in the English language and an English translation is readily available, such translation is also attached; if translation is not attached, it is not readily available to the undersigned. If a foreign language patent document is cited, and an English language equivalent is known to the undersigned, then such an equivalent patent is also cited on the attached form along with the corresponding foreign language patent and a connecting arrow indicated therebetween; if no such English language equivalent is cited then none is known to the undersigned.

In accordance with MPEP Section 609 it is requested that each document cited (including any mentioned in Applicants' specification which is not repeated on the attached PTO-1449 form) be given thorough consideration and be cited of record in the prosecution history of the present application by initialing on the PTO-1449 form, so that it will appear on the face of the patent issuing on the present application, even if the Examiner does not consider it sufficiently pertinent to use in a rejection, or otherwise does not believe that the guidelines for citation have been fully complied with.

The present Information Disclosure Statement is being submitted in compliance with 37 C.F.R. §1.56 as an Examiner might consider any cited document important in deciding whether to allow the application to issue as a patent, but the citation of each document is not to be construed as an admission that such document is necessarily relevant or prior art. No representation is intended that the cited documents represent the results of a complete search, and it is anticipated that the Examiner in the normal course of examination, will make an independent search and will determine the best prior art consistent with 37 C.F.R. §1.104(a), and in the course of such search will review for relevance every document cited on the attached form.

Early and favorable consideration is earnestly solicited.

Respectfully submitted,  
Aviram SARIEL et al.



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Maier FENSTER,  
Registration No. 41,016

February 24, 2002  
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Cowan, Liebowitz and Latman, P.C.  
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**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No. **#3**  
141/02497

In Re Application Of: **Aviram SARIEL et al.**

**Rec'd PCT/PTO 05 MAR 2002**

Serial No. 09/926,547	I. A. Filing Date September 5, 1999	Examiner Unknown	Group Art Unit To be assigned
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Title: **IMAGE COMPRESSION**



Address to:  
Assistant Commissioner for Patents  
Washington, D.C. 20231

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**37 CFR 1.97(b)**

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

**37 CFR 1.97(c)**

2. ☐ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

☐ the statement specified in 37 CFR 1.97(e);

**OR**

☐ the fee set forth in 37 CFR 1.17(p).

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<b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)				ATTY DOCKET NO. 141/02497		SERIAL NO. 09/926,547	
				A. SARIEL et al.			
				FILING I.A. Filing Date - 09/05/99		GROUP To be assigned	
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
1	3,969,699	13 Jul '76	MCGLAUGHLIN, L. D.				
2	4,005,385	25 Jan '77	JOYNSON, R. E. et al.				
3	4,460,969	17 Jul '84	CHEN, P. et al.				
4	4,590,608	20 May '86	CHEN, P. et al.				
5	4,615,619	7 Oct '86	FATELEY, W. G.				
6	4,847,796	11 Jul '89	ALEKSOFF, C. C. et al.				
7	4,892,370	9 Jan '90	LEE, Y. T.				
8	4,892,408	9 Jan '90	PERNICK, B. J. et al.				
9	4,972,498	20 Nov '90	LEIB, K. G.				
10	5,072,314	10 Dec '91	CHENG, T. Y.				
11	5,080,464	14 Jan '92	TOYODA, H.				
<b>FOREIGN PATENT DOCUMENTS</b>							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	+ TRANSLATION YES NO	
12	EP 0 577 258	5 Jan '94	EUROPE				
13	JP 2-120917	8 May '90	JAPAN			✓	
14	JP 2-127625	16 May '90	JAPAN			✓	
15	JP 7-143484	2 Jun '95	JAPAN			✓	
16	JP 8-129197	21 May '96	JAPAN			✓	
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
17	AKITOSHI, Y. et al.; "Optical Computing Techniques for Image/Video Compression;" Proceedings of the IEEE; US; New York; Vol. 82; No. 6; pages 948-954; XP000438344						
18	ARMAND, A. et al.; "Real-Time Parallel Optical Analog-to-Digital Conversion;" March 1980; Optics Letters; Vol. 5; No. 3						
EXAMINER				DATE CONSIDERED			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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I.A. Filing Date - 09/05/99

GROUP  
To be assigned

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	19	5,107,351	21 Apr '92	LEIB, K. G. et al.		
	20	5,216,529	1 Jun '93	PAEK, E. G. et al.		
	21	5,227,886	13 Jul '93	EFRON, U. et al.		
	22	5,235,439	10 Aug '93	STOLL, H. M.		
	23	5,262,979	16 Nov '93	CHAO, T.		
	24	5,274,716	28 Dec '93	MITSUOKA, Y. et al.		
	25	5,327,286	5 Jul '94	SAMPSELL, J. B. et al.		
	26	5,339,305	16 Aug '94	CURTIS, K. R. et al.		
	27	5,454,047	26 Sep '95	CHANG, D. B. et al.		
	28	5,537,492	16 Jul '96	NAKAJIMA, T. et al.		
	29	5,675,670	7 Oct '97	KOIDE, K.		

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

	30	BRENNER, K. H. et al.; "Implementation of an Optical Crossbar Network Based on Directional Switches;" May 10, 1992; Applied Optics; Vol. 31; No. 14; pages 2446-2451
4	31	CHENG, L. M. et al.; "Optical Cosine Transform Using Phase Conjugation Technique;" September 16-18, 1991; Proceedings of Third International Conference on Holographic Systems, Components and Applications; Organized by Electronics Division of the Institution of Electrical Engineers; pages 114-117

EXAMINER

DATE CONSIDERED

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52002 ATTY DOCKET NO.  
141/02497

SERIAL NO. 09/926,547

Efraim GOLDENBERG et al.

<b>FILING</b> <b>I.A. Filing Date - 09/05/99</b>
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## FOREIGN PATENT DOCUMENTS

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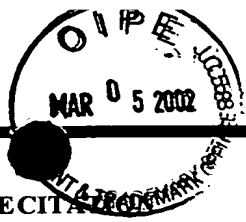
**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

		33	FUKUI, M. et al.; "High-Throughput Optical Image Crossbar Switch that Uses a Point Light Source Array;" March 1, 1993; Optics Letters; Vol. 18; No. 5; pages 376-378
		34	GONZALEZ, R. C. et al.; "Digital Image Processing;" 1992; Addison Wesley Publishing Company; pages 84-119, 142-145, and 374-381; ISBN 0-201-50803-6

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**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

Docket Number (Optional) <b>141/02497</b>	Application Number <b>09/926,547</b>
Applicant(s) <b>A. SARIEL et al.</b>	
Filing Date <b>I.A. Filing Date - 09/05/99</b>	Group Art Unit <b>To be assigned</b>

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	35	GOODMAN, J. W. et al.; "Fully Parallel, High-Speed Incoherent Optical Method for Performing Discrete Fourier Transforms;" January 1978; Optics Letters; Vol. 2; No. 1; pages 1-3
	36	GOURLAY, J. et al.; "Hadamard Transform Image Processing and Its Optical Implementation with Ferroelectric Liquid Crystal Spatial Light Modulators;" Jan./Feb. 1995; International Journal of Optoelectronics (Incl. Optical Computing & Processing); GB; Taylor & Francis; London; Vol. 10; No. 1; pages 51-58; XP000582638
	37	HAMANAKA, K. et al.; "Multiple Imaging and Multiple Fourier Transformation Using Planar Microlens Arrays;" October 1, 1990; Applied Optics; Vol. 29; No. 28; pages 4064-4070
	38	HARMUTH, H. F.; "Sequency Theory - Foundations and Applications;" 1977; Academic Press; pages 1-121
	39	LEE, J. N.; "Acousto-Optic Techniques for Information Processing Systems;" October 14-16, 1987; IEEE Ultrasonics Symposium; Vol. 1; pages 475-484
	40	MAROM, D. M. et al.; "All-Optical Reduced State 4x4 switch;" March 1996; Optics and Photonics News; page 43; column 3
	41	WANG, N. et al.; "Cantor Network, Control Algorithm, Two-Dimensional Compact Structure and Its Optical Implementation;" December 10, 1995; Applied Optics; Vol. 34; No. 35; pages 8176-8182
	42	WU, Y. et al.; "Optical Crossbar Elements Used for Switching Networks;" January 10, 1994; Applied Optics; Vol. 33; No. 2; pages 175-178
	43	YU, F. T. S. et al.; "Optical Signal Processing, Computing, and Neural Networks;" 1992; John Wiley & Sons, Inc.; Sections 8.7 and 8.8; pages 308-319 and 326-329
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